least one reactant is directly supplied by the feed means when the reactor apparatus is in use, and in that, upon rotation of the support element, the at least one reactant forms a generally annular film within the at least one undercut trough and passes therefrom across the surface of the support element.

2.(Amended) A reactor as claimed in claim 1, wherein the axis is substantially parallel to a direction of action of terrestrial gravity.

3.(Amended) A reactor as claimed in claim 1, wherein the axis is inclined with respect to a direction of action of terrestrial gravity.

4.(Amended) A reactor as claimed in claim 1, wherein the axis is substantially perpendicular to a direction of action of terrestrial gravity.

5.(Amended) A reactor as claimed in claim 1, wherein the trough is centrally located in the region of the axis.

6.(Amended) A reactor as claimed in claim 1, wherein the trough is in the form of an annulus.

7.(Amended) A reactor as claimed in claim 1, wherein the trough is centred about the axis.

8.(Amended) A reactor as claimed in claim 1, wherein the trough is not centred on the axis.

9.(Amended) A reactor as claimed in claim 1, wherein a plurality of troughs is provided in the surface.

10.(Amended) A reactor as claimed in claim 9, wherein each trough has associated with it a feed means.

11.(Amended) A reactor as claimed in claim 1, wherein the trough is provided with a matrix which serves to assist reactant in the trough to rotate with the support element when this is rotated.

12.(Amended) A reactor as claimed in claim 11, wherein the matrix comprises a fibrous mesh.

14.(Amended) A reactor as claimed in claim 12, wherein the fibrous mesh includes a catalytic material.

15.(Amended) A reactor as claimed in claim 1, wherein the collector means includes a receptacle in the form of a bowl or trough at least partially surrounding the support element.

16.(Amended) A reactor as claimed in claim 1, wherein the collector means includes a deflector positioned about a periphery of the support element, against which product is thrown from an edge region of the surface when the support element is rotating at an appropriate speed.

17.(Amended) A reactor as claimed in claim 1, wherein the collector means is coated or otherwise provided with a catalytic material.

18.(Amended) A reactor as claimed in claim 1, wherein the collector means includes means for heating or cooling product in the collector means to a predetermined temperature.

19.(Amended) A reactor as claimed in claim 1, wherein the collector means is provided with feed means for adding a reactant to product collected therein.

20.(Amended) A reactor as claimed in claim 1, wherein the collector means comprises a wall disposed on a periphery of the support element and extending from the surface.

21.(Amended) A reactor as claimed in claim 20, wherein the collector means further comprises a pitot tube which extends close to the surface in the region of the wall and which serves to remove product from this region when the support element is rotated.

22.(Amended) A reactor as claimed in claim 1, wherein the collector means is adapted at least partially to recycle collected product to the trough as feed reactant.

23.(Amended) A reactor as claimed in claim 1, wherein the trough is coated or otherwise provided with a catalytic material.

24.(Amended) A reactor as claimed in claim 1, including a plurality of support elements.

25.(Amended) A reactor as claimed in claim 24, wherein the plurality of support elements is mounted on a single axis of rotation.

26.(Amended) A reactor as claimed in claim 24, wherein the plurality of support elements is mounted on a plurality of axes of rotation.

27.(Amended) A reactor as claimed in claim 24, wherein product collected from a first support member is used as feed for a second support member.

28.(Amended) A reactor as claimed in claim 24, wherein feed means connected in parallel are used to supply reactant to each support element and in which collector means connected in parallel are used to collect product from each support element.

29.(Amended) A reactor as claimed in claim 27, wherein a processing unit is provided

between the collector means of the first support member and the feed means of the second support member.

30.(Amended) A reactor as claimed in claim 29, wherein the processing unit is a pump, an extruder, a heater or a heat exchanger.

31.(Amended) A reactor as claimed in claim 1, wherein the feed means includes means for applying electromagnetic radiation or energy to the reactant.

32.(Amended) A reactor as claimed in claim 1, further including means for applying vibration to the support member.

33.(Amended) A reactor as claimed in claim 1, wherein there is further provided a rotary impeller or fan mounted close to the surface and operable to generate a gaseous flow from a periphery of the surface towards a central region thereof, this flow being counter-current to a flow of reactant on the surface.

cont A2

REMARKS

The claims have been amended to eliminate multiple dependencies. Two sets of claims are included, one set showing the changes made in this response (attached) and one clean set (set out above). No new matter has been added to the application.

A declaration has been enclosed. Additional claims fees of $117.00 have been included, however, no fee for multiple dependent claim has been included as the multiple dependencies have been removed by preliminary amendment.

Applicant respectfully submits that the application is in condition for allowance. A Notice of Allowance is hereby respectfully requested.

Should the Examiner feel that a telephone conference would advance the prosecution of this application, he is encouraged to contact the undersigned at the telephone number listed below.

Applicant respectfully petitions the Commissioner for any extension of time necessary to render this paper timely.